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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,037	03/30/2004	Atsushi Saito	119081	1419

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EXAMINER

KUGEL, TIMOTHY J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

5

<b>Office Action Summary</b>	<b>Application No.</b> 10/812,037	<b>Applicant(s)</b> SAITO, ATSUSHI	
	<b>Examiner</b> Timothy J. Kugel	<b>Art Unit</b> 1712	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 October 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7-13 and 15-17 is/are pending in the application.  
     4a) Of the above claim(s) 7-10 and 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 11-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-5, 7-13 and 15-17 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 and 12 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>see attached</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-5, 7-13 and 15-17 are pending as amended on 12 October 2006, claims 6 and 14 being cancelled. Claims 7-10 and 15-17 are withdrawn from consideration.
2. The text of those sections of Title 35, US Code not included in this action can be found in a prior Office action.

### ***Election/Restrictions***

3. This application contains claims 7-10 and 15-17 drawn to an invention nonelected with traverse in the reply filed on 21 June 2006. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

### ***Information Disclosure Statement***

4. The information disclosure statements submitted on 11 August 2006 and 18 September 2006 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statement. Please note that the reference JP05-320586 appears on both the 11 August 2006 and 18 September 2006 information disclosure statements.
5. Further, applicant has supplied a copy of JP04-332404, which, due to a typographical error on the information disclosure statement filed 24 February 2006 was

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not considered. Applicant states that US Patent 5,302,456 (Matsui hereinafter) is the English language equivalence to JP04-332404; therefore, in the interest of compact prosecution and as a courtesy to applicant, JP04-332404 has been included on the notice of references cited form PTO-892 attached to this Office action.

### ***Response to Amendments***

6. Applicant's replacement drawing, filed 12 October 2006, with respect to indicating Fig. 6 to be 'prior art' has been fully considered and is corrective.

The objection to the drawings has been withdrawn.

7. Applicant's cancellation of claims 6 and 14, filed 12 October 2006, renders the previously cited rejections under 35 USC § 102 and 35 USC § 112 moot.

The rejection of claims 6 and 14 under 35 USC 112, first paragraph, as lacking enablement, has been withdrawn.

The rejection of claims 6 and 14 under 35 USC 102(b) as being anticipated by US Patent Application Publication 2002/0084019 (Date hereinafter) has been withdrawn.

The rejection of claims 6 and 14 under 35 USC 102(b) as being anticipated by Matsui has been withdrawn.

### ***Claim Rejections - 35 USC § 112***

8. Claims 1-5 and 11-13 stand rejected under 35 USC 112, first paragraph, because the specification, while being enabling for epoxies, amines, imidazoles, acid

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anhydrides, and phenols for the first substance of claims 1, 2, 3, 5, 11 and 13 and as the second substance of claims 1, 2, 4, 5, 12, and 13 and for amines, imidazoles, acid anhydrides, and phenols for the third substance of claims 1-5 and 11-13, does not reasonably provide enablement for any substance to be the first, second and/or third substance. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

Since the breadth of the instant claims, nature of the invention and state of the adhesive art allows for literally thousands of substances to be potential first, second and/or third substances and since reactions and conductivity testing would need to be made for each combination and since the inventor has provided little direction and no working examples; one of ordinary skill would require an undue quantity of experimentation to make the invention based on the content of the disclosure.

### ***Claim Rejections - 35 USC § 102***

9. Claims 1-4, 11 and 12 stand rejected under 35 USC 102(b) as being anticipated by Date.

Date teaches an anisotropic conductive adhesive comprising an agent 'A' selected from components, an acrylic monomer, a peroxide, a reducing agent, an epoxy resin precursor, a curing agent and a microcapsule-type conductive filler obtained by coating conductive fine particles with an insulating resin and containing at least one or two of the acrylic monomer, the peroxide and the reducing agent, and an agent 'B'

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comprising all of the remaining components which are not selected in 'A' (¶0024) and wherein the curing agent can be an acid anhydride (¶0037).

10. Claims 1-3, 5, 7-11 and 13 stand rejected under 35 USC 102(b) as being anticipated by Matsui.

Matsui teaches an anisotropic conductive (Column 2 Lines 12-20) adhesive (Column 3 Lines 50-63) composition comprising microcapsules dispersed in a resin matrix wherein the microcapsules comprising conductors, an acting material and a wall member formed of an insulative material (Column 2 Lines 12-20) wherein the insulative material may be a thermoplastic resin or an epoxy (Column 2 Lines 21-31), the acting material may include amines, imidazoles and phenols (Column 3 Line 50 – Column 4 Line 10), the conductors may be conductive particles (Column 3 Lines 42-46) and the resin matrix may be an epoxy mixed with acrylate resins and heat curing agents (Column 4 Lines 11-31).

### ***Response to Arguments***

11. Applicant's arguments filed 12 October 2006 have been fully considered but they are not persuasive.

Applicant argues that the first and second substances are fully enabled by the specification, citing the examples in the specification of epoxies, amines, imidazoles, acid anhydrides, and phenols as compounds disclosed as being appropriate interchangeably for the first and second substances and amines, imidazoles, acid

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anhydrides, and phenols as being disclosed in the specification as examples of the third substance; This may be so, but claims 1, 2, 5 and 13 do not recite any of the exemplified first or second substance compounds and none of claims 1-5 and 11-13 recite any compound as the third substance. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant further argues that neither Date nor Matsui disclose a third substance that is dispersed in the second substance; however, Date's teaching of an admixture (¶0037) and Matsui's teaching of the components being mixed (Column 4 Lines 11-31) read on this limitation.

Applicant finally argues that Matsui fails to teach a third component curable by heat; however Matsui teaches an epoxy mixed with acrylate resins and heat curing agents (Column 4 Lines 11-31).

### **Conclusion**

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 7,110,163

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Kugel whose telephone number is (571) 272-1460. The examiner can normally be reached 6:00 AM – 4:30 PM Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

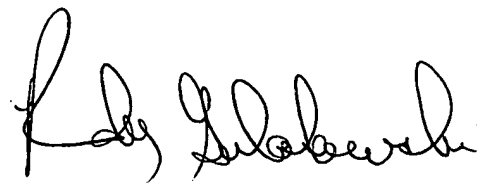
15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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A handwritten signature in black ink, appearing to read "Randy Gulakowski". The signature is fluid and cursive, with the first name "Randy" and last name "Gulakowski" clearly distinguishable.

RANDY GULAKOWSKI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

TJK

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